includes plural vectors in which each vector includes an array of strings.

REMARKS

Favorable reconsideration of this application, in view of the following comments and as presently amended, is respectfully requested.

Claims 1-36 are pending in this application. Claims 1, 10, 19, and 28 were rejected under 35 U.S.C. § 112, second paragraph. Claims 1, 2, 10, 19, and 28 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 6,393,407 to Middleton, III et al. (herein "Middleton"). Claims 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, and 36 were rejected under 35 U.S.C. § 103(a) as unpatentable over Middleton in view of U.S. patent 5,887,216 to Motoyama.

Initially, Applicants and Applicants' representative wish to thank Examiners Parton and Dinh for the personal interview granted on October 30, 2002. During that personal interview the outstanding rejections were discussed in detail. Further, during that interview amendments were discussed that may help to clarify the claims over the applied art. The present response sets forth the amendments discussed during the interview. The Examiners indicated they would further consider such amendments when formally presented in a filed response.

Addressing first the rejection of Claims 1, 10, 19, and 28 under 35 U.S.C. §112, second paragraph, that rejection is traversed by the present response.

Each of the above-noted claims is amended by the present response to clarify the limitations therein by no longer referring to "the abstract class". The claim amendments are believed to address the rejection under 35 U.S.C. § 112, second paragraph.

Addressing now the rejection of Claims 1, 2, 10, 19, and 28 under 35 U.S.C. § 102(e)

as anticipated by Middleton, that rejection is traversed by the present response.

It is initially noted that each of independent Claims 1, 10, 19, and 28 is amended by the present response to clarify features recited therein.

It is first noted that each of independent Claims 1, 10, 19, and 28 is amended by the present response to clarify that the monitoring operation that generates the log of the monitored data is performed "without any initial connection to the communication" unit that receives the log of the monitored data. That is, in the claimed invention there is no requirement that the communication unit to which the log of the monitored data is to be sent has to be connected to prior to beginning the monitoring and logging operation.

That operation clarified in the claims clearly distinguishes over the teachings in the applied art to Middleton.

More particularly, in <u>Middleton</u> communication with the web server needs to be established prior to the monitoring session, as noted at column 3, line 66, to column 4, line 1. In the claims as currently written there is no requirement for such a prior establishment of communication. In fact, the claimed invention is designed so that the monitoring and logging operations can take place without any prior communication to the communication unit to which the log is ultimately to be sent. Such a feature as clarified in the claims clearly distinguishes over the teachings in <u>Middleton</u>.

Further, the above-noted claims now clarify the form of the map for the monitored data. In the claimed invention a log of monitored data is provided in the form of a map. As clarified in the claims the map maps each of "key data in a key portion of the map to respective value data in a corresponding value data portion". Examples of the type of maps utilized for the log of the monitored data are shown in Figures 22-25 of the present specification, as non-limiting examples. As shown for example in Figure 22 in the present

specification in each map each key portion 1810 is mapped to a value portion 1820. Such a structure of a map of log data in the claimed invention allows the benefit of a simplified storage structure, and also a storage structure that can be easily expanded. Such a structure of the mapping of the log of the monitored data is believed to be neither be taught nor suggested by Middleton.

With respect to the above-noted feature recited in the claims the outstanding Office

Action cites the disclosure in <u>Middleton</u> at column 4, lines 22-25 and 35-39, and states

"[n]ote that the reference [Middleton] does not use the specific terms, but it does create a file with data to be collected (key data) mapped to the value (value data)".²

The above-noted basis for the outstanding rejection is traversed in that <u>Middleton</u> does not disclose storing a log of monitored data in a map. <u>Middleton</u> discloses utilizing an applet program for tracking and logging activities of the user in a memory while the user is viewing a web page replica 40.³ Further, at column 4, lines 35-49, <u>Middleton</u> describes different regions of a web page that can be monitored. However, those regions noted at column 4, lines 35-49, are not even directed to a log of monitored data but instead are directed to the web page being monitored. <u>Middleton</u> does not teach or suggest utilizing a log of monitored data that includes key data portions mapped to respective value data portions, again see for example Figures 22-25 in the present specification as non-limiting examples.

In such ways, the above-noted feature recited in the claims is neither taught nor suggested by <u>Middleton</u>.

²Office Action of August 1, 2002, at page 3, prenumbered paragraph 7b.

³Middleton at column 4, lines 22-25.

It is also noted that each of dependent Claims 8, 17, 26, and 35 is also amended by the present response to clarify the nature of the map of the monitored data. Specifically, those claims clarify that the value data "includes plural vectors in which each vector includes an array of strings". That specific embodiment is shown, as non-limiting examples, in Figures 24 and 25 in the present specification. As noted in those figures as non-limiting examples, each value data portion 2020 corresponds to a different vector. Further, each vector in turn includes an array of strings. Such an operation in the claimed invention allows further simplification of plural monitoring operations, which is again neither taught nor suggested by Middleton.

In addressing those Claims 8, 17, 26, and 35 the outstanding Office Action states:

[Middleton] further teach[es] means wherein the value data includes vectors which contain string data (column 4, lines 35-49; figure 2). Note that vector format is not explicitly stated in the reference but is the implied method of storage due to the linking of key data to the values for that data that will have several different values for one session (hover time, for example).

The above-noted basis for the outstanding rejection is also traversed in that <u>Middleton</u> does not teach or imply utilizing a map with key data portions and value data portions each including a vector, and each vector in turn including an array of strings. Again the noted portion in <u>Middleton</u> at column 4, lines 35-39, is only directed to different regions of a web page that are monitored by the applet 44. Thus, <u>Middleton</u> even further fails to teach or suggest the subject matter of the above-noted Claims 8, 17, 26, and 35, and thus those claims even further distinguish over the applied art.

In such ways, each of the above-noted claims is believed to clearly distinguish over the teachings in <u>Middleton</u>.

⁴Office Action of August 1, 2002, page 4, prenumbered paragraph 11.

Addressing now the rejection of Claims 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, and 36 under 35 U.S.C. § 103(a) as unpatentable over <u>Middleton</u> in view of <u>Motoyama</u>, that further rejection is also traversed by the present response.

The deficiencies of <u>Middleton</u> as noted above are discussed in detail. Further, the teachings in <u>Motoyama</u> are not cited to address such deficiencies in <u>Middleton</u>, and thus the combination of teachings of <u>Middleton</u> in view of <u>Motoyama</u> is not believed to address the futures of the above-noted claims.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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IN THE CLAIMS

1. (Amended) A system comprising:

an interface of a target application, the interface comprising a plurality of operations to be selected by a user;

a monitoring unit configured to monitor data of selecting of the plurality of operations of the interface by the user, and to generate a log of the monitored data, the log of the monitored data being in a form of a map mapping each of key data in a key portion of the map to respective value data in a corresponding value data portion;

a communicating unit configured to receive [an object derived from the abstract class including] the log of the monitored data, and to communicate the log of the monitored data, and

wherein the monitoring unit is configured to generate the log of the monitored data without any initial connection to the communicating unit.

- 8. (Amended) A system according to Claim 7, wherein the value data <u>portion</u> includes <u>plural</u> vectors <u>in</u> which [contain string data] <u>each vector includes an array of strings</u>.
 - 10. (Amended) A system comprising:

interface means of a target application means, the interface means for providing a plurality of operations to be selected by a user;

monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for generating a log of the monitored data, the log of the monitored data being in a form of a map mapping each of key data in a key portion of the map to respective value data in a corresponding value data portion;

communicating means for receiving [an object derived from the abstract class including] the log of the monitored data, and for communicating the log of the monitored data, and

wherein the monitoring means generates the log of the monitored data without any initial connection to the communicating means.

- 17. (Amended) A system according to Claim 16, wherein the value data <u>portion</u> includes <u>plural</u> vectors <u>in</u> which [contain string data] <u>each vector includes an array of strings</u>.
- 19. (Amended) A method of monitoring usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting of the plurality of operations of the interface by the user; generating a log of the monitored data, the log of the monitored data being in a form of a map mapping key each of data in a key portion of the map to respective value data in a corresponding value data portion; and

receiving [an object derived from the abstract class including] the log of the monitored data, and communicating the log of the monitored data, and

wherein the monitoring and generating steps are performed without any initial connection to the communicating unit.

26. (Amended) A system according to Claim 25, wherein the value data <u>portion</u> includes <u>plural</u> vectors <u>in</u> which [contain string data] <u>each vector includes an array of strings</u>.

28. (Amended) A computer program product comprising:

a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface of a target application, the interface comprising a plurality of operations to be selected by a user, comprising:

a first computer code device configured to monitor data of selecting of the plurality of operations of the interface by the user, and configured to generate a log of the monitored data, the log of the monitored data being in a form of a map mapping each of key data in a key portion of the map to respective value data in a corresponding value data portion; and

a second computer code device configured to receive [an object derived from the abstract class including] the log of the monitored data, and to communicate the log of the monitored data, and

wherein the first computer program code executes the monitoring and generating without any initial connection to the communicating unit.

35. (Amended) A system according to Claim 24, wherein the value data <u>portion</u> includes <u>plural</u> vectors <u>in</u> which [contain string data] <u>each vector includes an array of strings</u>.